

Jan. 1892.

Mr. Marth, Satellites of Uranus.

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G.M.T.			G.M.T.			G.M.T.		
1892.	h		1892.	h		1892.	h	
Apr. 28	9.9	Di. Ecl. R.	Apr. 28	17.5	Te. $\epsilon$	Apr. 29	16.1	Te. $\eta$
	10.6	Te. $\theta$	29	9.2	Te. $\zeta$		17.3	En. $\eta$
	10.6	Mi. $\theta$		9.3	Mi. $\theta$		18.1	Di. $\gamma$
	11.1	Titan $\eta$		10.9	En. $\zeta$	30	9.7	En. $\epsilon$
	11.5	Di. $\epsilon$		11.2	Te. $\beta$		9.9	Te. $\delta$
	12.6	Te. $\delta$		12.6	Di. $\zeta$		13.2	Te. Ecl. R.
	15.9	Te. Ecl. R.		14.1	Te. $\gamma$		13.8	Mi. $\epsilon$
	16.1	Rh. $\zeta$		14.8	Di. $\beta$		14.8	Te. $\epsilon$
	16.6	Mi. $\epsilon$		15.2	Mi. $\epsilon$			

(To be concluded.)

## Ephemeris of the Satellites of Uranus, 1892. By A. Marth.

Ariel.						Umbriel.			
Greenwich Noon.	P	$a_1$	$b_1$	$u_1 - U$	Diff.	$a_2$	$b_2$	$u_2 - U$	Diff.
1892.									
Mar. 1	277.70	14.75	+11.14	185.25	1428.39	20.55	+15.52	267.40	868.68
11	277.81	14.86	11.19	173.64	.35	20.70	15.58	56.08	.65
21	277.94	14.95	11.21	161.99	.32	20.83	15.61	204.73	.62
31	278.09	15.02	11.20	150.31	.28	20.93	15.60	350.35	.60
Apr. 10	278.26	15.07	11.17	138.59	.26	20.99	15.56	141.95	.58
20	278.44	15.09	11.11	126.85	.23	21.02	15.48	290.53	.57
30	278.62	15.09	+11.03	115.08	.21	21.02	+15.37	79.10	.56
May 10	278.78	15.06	10.94	103.29	.20	20.98	15.24	227.66	.55
20	278.93	15.01	10.83	91.49	.20	20.90	15.09	16.21	.56
30	279.06	14.93	10.72	79.69	.19	20.80	14.93	164.77	.56
June 9	279.17	14.83	10.60	67.88	.20	20.67	14.77	313.33	.57
19	279.25	14.73	10.49	56.08	1428.20	20.52	14.61	101.90	868.59
29	279.29	14.61	+10.38	44.28		20.35	+14.46	250.49	
Titania.					Oberon.				
	$a_3$	$b_3$	$u_3 - U$	Diff.	$a_4$	$b_4$	$u_4 - U$	U	B
Mar. 1	33.71	+25.46	253.37	413.47	45.07	+34.05	191.93	357.105	+49.06
11	33.95	25.56	306.84	.45	45.40	34.18	99.27	.178	48.85
21	34.16	25.61	0.29	.42	45.68	34.24	6.59	.270	48.56
31	34.32	25.59	53.71	.41	45.90	34.22	273.89	.377	48.21
Apr. 10	34.43	25.52	107.12	.40	46.04	34.12	181.18	.494	47.82
20	34.48	25.39	160.52	.39	46.11	33.95	88.46	.615	47.41
30	34.47	+25.21	213.91	.39	46.10	+33.72	355.73	.735	+47.00
May 10	34.41	25.00	267.30	.40	46.01	33.43	263.00	.848	46.59
20	34.29	24.75	320.70	.40	45.85	33.10	170.28	357.950	46.21
30	34.12	24.49	14.10	.42	45.62	32.75	77.58	358.037	45.88
June 9	33.90	24.22	67.52	.43	45.34	32.40	344.88	358.107	45.60
19	33.65	23.96	120.95	413.45	45.01	32.05	252.20	358.157	45.39
29	33.38	+23.71	174.40		44.64	+31.71	159.55	358.183	+45.27

The values of  $P$ ,  $a$ ,  $b$ ,  $u - U$  being interpolated for the times for which the apparent positions of the satellites are required, the position-angles  $p$  and distances  $s$  of the satellites are found by means of the formulæ:

$$s \sin (p - P) = a \sin (u - U);$$

$$s \cos (p - P) = b \cos (u - U).$$

It is very desirable that some good positions of the satellites should be procured; the inner ones especially have been already too long neglected.

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*Erratum in "Monthly Notices."*

Vol. li., Appendix vii., pp. 176, 177, for Professor E. S. Holden, read The Lick Observatory.